SUPREME COURT, U. S.

Supreme Court, U.S.
FILED
SEP 29 1971
E. ROBERT SEAVER, CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1971

Docket No. 71-449

VAN MARK PRODUCTS CORPORATION and
EUGENE VAN CLEAVE,
Petitioners,

vs.

TAPCO PRODUCTS COMPANY,
Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

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WO. 2-8745—WO. 2-8732

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Petitioners respectfully pray that a Writ of Certiorari issue to review the Judgment entered on July 12, 1971 of the United States Court of Appeals for the Sixth Circuit in its cause, numbered 20,835.

I. OPINIONS BELOW

The Opinion of the Sixth Circuit Court of Appeals in this cause is set forth in the Appendix to this Petition commencing at page 1(a). It has not been officially reported, as of this moment.

A Petition for Correction of the Opinion and for a Rehearing was filed, but was denied by an Order of the Court dated August 30, 1971 (see Petition Appendix, p. 19a). Such order was not reported.

The Opinion of the District Court is set forth in the Appendix to this Petition, commencing at page 23a. It has been officially reported at — F. Supp. —, and also at 166 USPQ 530.

II. GROUNDS FOR THIS COURT'S JURISDICTION

The Judgment sought to be reviewed was dated and entered on July 12, 1971. Petitioners filed a timely Petition for Correction of Opinion and Rehearing, which was denied by an Order dated August 30, 1971 (19a).

The United States Code, Title 28, Section 1251(1), confers on this Court jurisdiction to review the Judgment in question by Writ of Certiorari.

III. QUESTION PRESENTED

Did the Court of Appeals, in reversing the District Court's Finding of Fact that the flat top hinge of the patented bending brake functioned no differently from the round top hinge of the prior art bending brake, violate Rule 52(a) of the Federal Rules of Civil Procedure, which rule restricts an Appellate Court from reversing a Finding of Fact of the Trial Court unless clearly erroneous.

IV. THE RULE INVOLVED

The relevant portion of Rule 52(a) F.R.C.P., provides that:

> "Findings of Fact shall not be set aside unless clearly erroneous, and due regard shall be given the opportunity of the Trial Court to judge of the credibility of the witnesses."

V. STATEMENT OF THE CASE

The Opinions below relate to the issue of validity of the Marsh Patent No. 3,161,223, issued December 15, 1964, relating to a Sheet Metal Brake, and assigned to the Respondent herein.

More specifically, the opinions relate to a contention that the flat top hinge of the patented bending brake functions differently from the round top hinge of the prior art bending brake, in the matter of providing full support to the sheet metal being bent during the bending operation.

The District Court personally observed the bending operations of the patented and prior art brakes and found that there was no new function or new result, and held the patent to be invalid for obviousness. More specifically, the District Court personally observed that at no time did the flat-top hinge of the patented brake support or engage the sheet metal during bending of the metal. Hence, it functioned no differently than the round top hinge of the prior art brake which the District Court also observed.

The actual bending operation consists solely of manually lifting a handle upwards. Such handle is on a drop "leaf" which swings up, engaging a piece of sheet metal previously clamped in the brake, and bending the sheet metal upwards. The brake works only one way, no matter who lifts the handle.

The Sixth Circuit Court of Appeals seems to have objected to the fact that the Trial demonstration of the brakes (meaning lifting the bending leaf handle) was performed by Defendant's counsel. The Court of Appeals seems to have ignored Plaintiff's counsel's express statement to the Trial Court that: "We have no objection, your Honor" (Appeal Appendix, p. 261) to Defendant's counsel conducting the Trial demonstration. Without ever having seen the brake or its operation, the Court of Appeals set aside the District Court's Finding of Fact.

The Court of Appeal's Finding that the flat-top hinge supports the sheet metal during bending, and particularly at the full bending (meaning approximately 90°) is not only mistaken, but is physically impossible. Additionally, the Court of Appeal's Finding, that during the Trial Court demonstration the brake was not operated to perform a full 90° bend, was based entirely upon a later "unsworn, self-serving statement" of Plaintiff's counsel, who upon

making that statement to the Court after the demonstration, was asked to repeat the demonstration himself to avoid any such challenge as to its validity, but refused to do so (Appeal Appendix, p. 369).

Instead, the Court of Appeals, contrary to the District Court's observations and Finding, found that the flat top hinge supports the sheet metal during bending and particularly "as the bend approached the vertical", and thereby found invention and patent validity based upon this mistaken Finding of Fact of a new function and new result.

In connection with Petitioner's Petition for Correction and Rehearing, the physical brake trial exhibits were shipped to the Court of Appeals with request that the Court look at these and lift the handle itself and see for itself that it is physically impossible for the hinges, whether flat or round, to engage or support the sheet metal during the bending. The Court of Appeals refused to look at the exhibits but nevertheless denied the Petition for correction of the manifestly mistaken fact.

A. Patent in Suit.

The patent-in-suit relates to a hand-operated, sheet metal bending device, called a "brake". A piece of sheet metal, such as aluminum sheet, such as is used for sidings of houses, is manually placed upon a table, with the edge of the sheet metal extending beyond the table edge. Then the sheet of metal is manually clamped in place upon the table by a strip called an "anvil" which presses down against the sheet metal and table top.

To bend the edge of the sheet metal which extends beyond the table, a bending leaf, which is like a drop leaf of a table, is manually lifted or swung up to push the sheet

metal up, so that it bends around the edge of the clamping strip or anvil.

A hinge connects the bending leaf to the edge of the work table upon which the sheet metal is clamped for bending. All of this is old in the prior art (3a).

"The only substantial difference between the two brakes was the hinge", to quote the Court of Appeals (9a). See also p. 4a.

The patentee Marsh testified that originally he had sold the prior art Rauen patent brake which was on the market, and whose hinge was a separate, piano-type round top hinge, secured by screws to the table and to the bending leaf. Later, he found that the screws tended to loosen, causing loosening of the hinge. Thus, upon seeing an integral or one-piece hinge in use elsewhere, he substituted such an integral hinge for the screw-on type prior hinge in order to eliminate the screw loosening problem and thereby provide greater strength.

That is all that he claimed to be his invention. He testified that the only difference between the prior art brake which he had sold and the patented brake was the adoption of the integral hinge in place of the prior screw-on separate piano hinge.

B. Flat-Top v. Round-Top Hinges.

The integral hinge is formed by cutting notches into the edge of the flat table and the flat leaf, to form integral projections between each pair of notches, with the projections of the flat leaf being interfitted with the projections of the flat table. A hinge pin then is passed through aligned holes in the aligned interfitting projections. The upper surfaces of the hinge projections are flat, because

they are cut out of the flat top table and leaf. Such flat top integral hinges were old.

The District Court found that the mere substitution of an old integral hinge for the separate hinge was dictated by the prior art and was obvious. The Court of Appeals agreed with this finding (13a-14a).

This Court, however, then found that there was a new function and "unsuspected results" arising because of the flat top shape of the hinges, finding that flat top hinges support the sheet metal during the bending, whereas round top hinges do not. It was that latter Finding of Fact, contra to the opposite finding on the same point by the District Court, which provokes this Petition to this Court.

It is clear that the only basis for the Court of Appeals reversal was its finding that the change in shape of the hinge from round top to flat top, was responsible for a new function. The District Court, who saw the hinges operate, found no new function. The Court of Appeals did not see the hinges operate—yet it found a new function.

Nowhere in the Patent Office record made by the applicant for patent, nowhere in the claim in suit, nowhere in the testimony of the patentee, was there any reference to or a contention that the flat top shape performed the alleged new function, supporting the sheet metal during bending in a manner different from the round top shape of the hinge.

The contention that the flat top shape provides full support during bending surfaced for the first time during the examination of Plaintiff's expert witness, a professor, who testified only from his diagram, later admitted by him to be inaccurate. The Trial Court, who heard and saw that witness, but who also saw the brakes being manipulated, rejected that theory. The Court of Appeals, who saw nei-

ther the witness nor the brakes, disregarded that finding of fact by the Trial Court.

Was it "clearly erroneous" for the Trial Court to rely on what he personally saw, how the hinges functioned, rather than on the speculations of a "professor expert", testifying from a diagram admittedly inaccurate, and unsupported by testimony of the patentee himself, or the record before the Patent Office?

C. The Court of Appeals' Mistaken Findings as to New Function.

During the course of the Trial, Plaintiff's expert witness, Professor Youngdahl, injected a new thought, something which was neither claimed in the patent nor described in the patent specification nor claimed by Marsh during his testimony, namely, that the flat tops of the hinges perform a new function. Youngdahl testified that in his opinion, the flat tops of the hinges fully supported the sheet metal during the bending.

He did not testify from the physical devices. Rather, he testified that his opinion was based upon an out of courtroom test which he himself ran, ex parte, wherein he bent a sheet of metal upon a patented brake and another sheet of metal upon a prior art brake. He explained his opinion to the Court by means of a diagram which he drew upon the blackboard, not by actually operating the brakes which were brought to the Court. On cross-examination, he admitted the blackboard diagram to be incorrect (Appeal Appendix, p. 273). "It was not accurate."

The Trial Judge observed Youngdahl's demeanor during his direct as well as his cross-examination testimony. The Trial Judge had the opportunity to judge of his credi-

bility; and rejected his opinion and his testimony. The Trial Judge chose to rely upon his own personal observation of the operation of the brakes, where it was clearly visible to him that at no time during the bending did either the flat top hinge of the patented brake or the round top hinge of the prior art brake contact the sheet metal. Thus, the Trial Judge rejected Youngdahl's testimony and found as a fact, what he saw with his own eyes, that the flat top hinge operates no differently from the round top hinge; and that there was no new function or result caused by the form or shape or flatness of the hinge.

The Court of Appeals, in disregard of Rule 52(a) F.R.C.P., chose to the contrary, accepting the so-called expert's direct testimony opinion, ignoring his cross-examination testimony, and ignoring the physical exhibits and the personal observations of the Court with respect thereto.

The Court of Appeals mistakenly considered that the hinge might support the metal differently in a bend on a short length of metal than in the bending of a longer piece of metal. The District Judge saw the brakes bend the metal, and he saw no support by the hinge. The Court of Appeals saw no brakes and no bending. Only in its speculations, "might very well be", "could be", etc., did the Court of Appeals suggest a distinction between long and short pieces being bent.

The District Judge had two pieces of conflicting evidence to weigh:

(1) The testimony of a hired expert who testified from a diagram based upon an out of court ex-parte test and admittedly inaccurate.

(2) The Courtroom demonstration, without objection by Respondent, of actual physical devices.

The District Court chose to reject the expert's testimony and to accept what he saw with his own eyes. Such a choice hardly qualifies as clear error, particularly when so regarded by a Court of Appeals who neither heard the testimony, saw the demonstration, nor saw the physical devices, nor looked at them.

D. Claim 7 in Issue.

The Trial Court found all seven of the claims of the patent-in-suit to be invalid for obviousness. On Appeal, Respondent confined itself only to Claim 7, which reads as follows:

> 7. In a brake for bending sheet metal, the combination comprising:
>
> a first member (table) having a flat clamping surface,
>
> an anvil member for clamping a piece of metal against said flat clamping surface on said first member,
>
> a second member (bending leaf) having a flat bending surface,
>
> each of said first and second members having substantially the entire length of the longitudinal edges thereof formed with longitudinally spaced intermeshing integral projections,
>
> each said projection of each said member having a surface thereof lying in the plane of the flat surface of its corresponding member,
>
> said projections having aligned openings therein,
>
> and a hinge pin extending through said integral projections and thereby defining a hinge so that said

second member may be swung relative to said first member to bend said metal about said anvil member.

Nowhere in the Claim, or for that matter in the patent specification, is there any statement to the effect that the hinge supports the sheet metal at any time during the bending. As is seen from looking at the physical exhibits, the patented and prior art brakes, it is apparent that geometrically it is physically impossible for the flat top hinge to support the sheet metal during bending in any manner different from the round top hinge. As soon as bending starts, the metal lifts away from the hinge, equally in one case as in the other.

E. Trial Court's Finding of Fact on Functioning of Hinge.

On the crucial point of novel function, the Trial Court found as a fact, as follows: (30a)

> "However, the Court . . . relies most heavily upon the Courtroom demonstration, which negates Plaintiff's position. The Court personally observed actual physical samples of both a prior art brake and a Marsh patent brake. In both instances, the sheet metal was lifted away from the hinge as the metal was bent, due to the geometric characteristics of the spacing of the brake parts in relation to the metal to be bent."

> "Thus, the Court finds Plaintiff's interpretation of flat, gapless hinge projections providing additional support and producing more uniform bend to be unsupported in fact and therefore the Court finds Defendant's interpretation of the claims to be the proper one."

At this point, it may be noted again that the patent claims in suit say nothing about a flat top hinge providing support for the metal during bending.

The Court of Appeals reversed the above finding, without having seen Plaintiff's expert witness, without having seen the physical devices, and without having looked at any demonstrations of the same.

Going one step further, the Court of Appeals has even held that Petitioners, having copied the patented commercial brake, are barred from even pointing out that hinge support of the sheet metal is impossible, as the Court of Appeals mistakenly found, on the grounds that one who copies a commercial device is foreclosed from challenging utility.

VI. REASONS FOR GRANTING THE WRIT

We respectfully submit that the Court of Appeals, in our view, deviated from acceptable judicial practice in disregarding Rule 52(a), thus requiring supervisory action by this Court. It seems to us that the Court of Appeals, without any "clearly erroneous" basis, reversed the District Court's Finding of Fact and found as a fact something which is physically impossible, and not only refused to correct the error upon which it based a finding of validity, but refused even to look at the physical exhibits which make the error manifest.

Rule 52 enjoins a Court of Appeals from setting aside a Finding of Fact unless "clearly erroneous" and requires a Court of Appeals to give "due regard to the opportunity of the Trial Court to judge of the credibility of the witness." We submit that this rule was twice disregarded in this case by the Court of Appeals. Only this Court has the supervisory power and jurisdiction to set aside such action by a Court of Appeals which in our view was in disregard of Rule 52(a).

Here, the Court of Appeals reached its conclusions on the functioning of the brakes, without seeing any brakes, without seeing them operate, and reversed the District Court who did see the brakes and who did see them operate and who concluded, based upon what he saw, that there was no difference in function.

Likewise, the Court of Appeals did not see or hear the witness; the District Court did. The District Court chose to disregard the testimony of the witness. The Court of Appeals chose to accept his *direct* testimony only, seemingly in disregard of the Rule 52 requirement that it give due regard to the opportunity of the District Court to judge of the credibility of the witness.

The Court of Appeals also held that Petitioners are barred from challenging utility of the patented device because Petitioners copied the device. If there is indeed such a rule applicable to this case, then it ought to be abolished, just as *Lear v. Atkins,* 395 US 653 abolished the estoppel against licensees challenging the validity of a patent. As in *Lear,* who else but an alleged copier would have the economic interest in proving patent invalidity, for whatever the reason, including lack of utility, with the public benefiting from the removal of scarecrow patents from the marketplace.

However, this point need not be considered in this Petition, since Petitioners do not challenge the increased strength utility of the patented brake, having adopted the integral hinge for the same reason that the patentee adopted it, namely, it is stronger and eliminates the problem of loosening screws on a separate screwed on hinge. Flatness of the tops of the hinge projections comes about simply because they are cut out of a flat top table and leaf edge. Thus, the challenge here has been only to the contention of new function or new results, namely, that the flat top hinge supports the metal during bending, which function is nei-

ther true nor possible as is evident upon observing a physical brake. We do not deny that the brake has utility. It bends metal, and that utility is admitted.

However, we do deny that the flat top hinge functions differently from the round top hinge. We do deny that the flat top hinge fully supports the metal during its bending. We do deny that precise and specific claim of utility.

VII. CONCLUSION

Since a holding of validity of a patent is a matter of paramount and important public interest, a Writ or Certiorari should be granted on the issue of alleged novel functioning of the patented brake.

Alternatively, this case should be remanded to the Court of Appeals with an Order that the Court of Appeals either look at the exhibits (the physical brakes) and observe the operation of their hinges and *then* reconsider its Finding that there is a new function or result, or that the Court of Appeals remand the case to the Trial Court for more detailed Findings as to function and results of the hinges.

We respectfully submit that if the Court of Appeals chooses to substitute its own Finding for that of the Trial Court as to how the hinges operate, it should at least look at them and see their operation, as the District Court did.

Respectfully submitted,

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APPENDIX

NO. 20835

IN THE

United States Court of Appeals

FOR THE SIXTH CIRCUIT

TAPCO PRODUCTS COMPANY, *Plaintiff-Appellant,* v. VAN MARK PRODUCTS CORPORATION and EUGENE VAN CLEAVE, *Defendants-Appellees.*	APPEAL from United States District Court for the Eastern District of Michigan, Southern Division.

OPINION

Decided and Filed July 12, 1971.

Before WEICK, PECK and McCREE, Circuit Judges.

WEICK, Circuit Judge. The suit in the District Court was for infringement of the Marsh Patent No. 3,161,223, issued December 15, 1964, on a sheet metal brake,[1] which patent had been assigned to Tapco. Appellee Van Cleave had been in the employ of Tapco when the brake was being developed. After leaving Tapco's employ he organized appellee Van Mark Products Corporation and commenced to produce a brake almost identical with the patented brake.

[1] "Brake" is the term used for a machine that bends sheet metal. The patented device was used principally for bending aluminum sheets to be used for siding, windows and doors of houses.

Tapco sued the appellees in the Circuit Court of Wayne County, Michigan, for unfair competition and appropriation of trade secrets. The suit was settled by Van Mark taking a non-exclusive license under the Marsh patent, which provided for a royalty to Tapco of 5-½%, with $10,000-pre-payment of royalties. Thereafter Van Mark did not comply with the royalty provisions of the license agreement and Tapco gave notice of termination and instituted the present action in the District Court for infringement of patent, unfair competition, and causes of action under the license agreement.

By agreement of the parties, the District Court heard only the patent infringement claim. After hearing the evidence the Court handed down an opinion holding that the patent was invalid. 318 F. Supp. 79. Tapco appealed.

The Marsh patent discusses the prior art and the objects of the invention, as follows:

> "It has heretofore been suggested that a brake for bending and forming sheet metal such as aluminum coil stock may comprise a pair of members which are hinged to one another by a hinge such as a piano hinge having the leaves thereof fixed to the respective members. In the construction of such a brake in substantial length so that long lengths of sheet metal can be bent and formed, a major problem is that extreme difficulty is encountered in aligning the hinge leaves with respect to the longitudinal edges of the first and second members. This inaccuracy not only results in an improper bend but, in addition, mars the surface of the sheet metal where it is coated with an enamel or other coating.
>
> "It is an object of this invention to provide a novel brake for bending and forming sheet metal which obviates the foregoing disadvantages of prior art brakes.

"It is a further object of the invention to provide such a brake which is light in weight, simple to operate and low in cost."

Claim 7 of the patent, which is relied on by Tapco, provides:

"7. In a brake tor bending sheet metal, the combination comprising

a first member having a flat clamping surface,

an anvil member for clamping a piece of metal against said flat clamping surface on said first member,

a second member having a flat bending surface,

each of said first and second members having substantially the entire length of the longitudinal edges thereof formed with longitudinally spaced intermeshing integral projections,

each said projection of each said member having a surface thereof lying in the plane of the flat surface of its corresponding member,

said projections having aligned openings therein,

and a hinge pin extending through said integral projections and thereby defining a hinge so that said second member may be swung relative to said first member to bend said metal about said anvil member."

Prior to issuance of the patent Tapco had been a distributor for a brake embodying the features of the Rauen prior art patent number 3,147,791, manufactured by Lyf-Alum, Inc., of which the patent in suit is an improvement

principally in the hinge arrangement which connects the clamping member with the bending member. The Rauen hinge was separately attached to the clamping and bending members by bolts or screws.

In the Marsh patent the hinge was formed by intermeshing integral projections extending the entire longitude of the edges of the clamping and bending members. Each projection has a flat surface in the plane of the flat clamping and bending surfaces. A pin extends through the projectons in order that the bending member may be swung about the clamping member and may bend the metal on the anvil. The hinge on Rauen has a round rather than a flat surface.

Dr. Youngdahl, plaintiff's expert witness, testified that the Marsh patent produces a straighter, sharper, and more uniform bend than does the Rauen patent, and does not mar the surface of the metal. He attributed this to the fact that the Marsh hinge more closely confines and supports the metal as the bending member reaches a vertical position. It was his opinion, demonstrated by a test which he made, that the Rauen hinge leaves a longitudinal groove, or a gap, between the clamping and bending members which results in less support or confinement of the metal during the final portion of the bend. He further testified with respect to the Rauen brake:

> "Now on that we are going to put our piece of sheet metal and we will clamp that piece of sheet metal—I'll use white chalk for that—with our clamping member, an anvil. To cause our bend we are going to pivot about this point. I think you can see, your Honor, that all I have done is just looked right at the end. We are only looking at this end view. We have to realize that

this piano hinge goes a long way down here and these surfaces go down. We are going to pivot member 17 about 16 at this point and cause our sheet metal to bend.

"Now, when that bending occurs this area at the hinge and the space, the metal is unsupported, there is nothing there to support it. If we move the hinge up where it contacts the metal, it puts a mark on it. This metal in this stock that we are bending has a thin coat of paint on it, oven white. They are going to put it on a man's house and if he sees these marks on it he won't pay for the job, is what it amounts to.

"So if the hinge is set high it marks it, the piano hinge; and if it's set low, it's unsupported. Then when you cause your pivot, your part 17 to pivot about the hinge and come up, you apply the force out where you have contact. The place where you have no contact has no force applied, is unsupported and tends to bulge. In fact, when you get your bend completed you end up with a bend that is not square and is not uniform but rather comes down and has a bulge in it, and that bulge varies along the length of the piece so as you sight down the piece, one place it might be square, another place the bend might have a bulge in it more or less and it isn't uniform. It's a random thing. When you don't support it and don't control it you have a random bulging that can occur along the full length because you realize I have only drawn one section and this is 8 or 10 feet long.

"THE COURT: That's the Rauen patent you are talking about?

A. That's the Rauen patent I am talking about."

With respect to the Marsh hinge, Dr. Youngdahl concludes:

> "Our sheet metal before bending is lying flat. It's in contact there. As we bend up we have surface contact and our metal is under control all the time. We know what's going to happen to it and we get a better bend. You can see right here where each of these projections have a surface and if we put a ruler on there it's supported in the area of the hinge. In a brake of considerable length, say, an 8′ foot brake, that amounts to a lot of area. This is much enlarged in scale but it wouldn't be at all unreasonable for that dimension that is unsupported there to be 3/16th of an inch, in fact, I think it's quite conservative. 3/16th is very little in a piano hinge, to fit a piano hinge in. If I were to take that 3/16th of an inch and multiply it by 8′, it would be 3/16ths x 8′, x 12″ per foot, and I get 18 square inches that I now support rather than have unsupported; and it's this additional support that, in my opinion, is the biggest factor in making a better bend on the patented brake than on a brake with a piano hinge."

In comparing the final stages of bending, as the bend approaches the vertical, using the Rauen hinge to the result achieved with the Marsh hinge, Dr. Youngdahl testifies:

> "I didn't intend to show that that all occurred right at this position. Where that flow of metal occurred is on the way up. You can see it. There is no support in there on the way up so you have no way of applying pressure on that up at the top and take that kink out. You can see it on the parts and you can see it on the brake."

The District Judge, during cross-examination of Dr. Youngdahl, became cognizant of the invention when he stated:

> "THE COURT: I think I've got his point. His point is that the projections, like take the top of a rubber ball and you cut off the top and it's straight across and that's what I think he is trying to say. Here the hinge leaves a little space between the rounded portion as it goes into the remaining top of the instrument but in their claim, the Marsh patent, I think he is trying to say that the hinge has been flattened off on top so that it's solid across; am I correct?
>
> A. That's right, that's exactly what it says.
>
> THE COURT: That's what you think is, in your opinion, a substantial difference sufficiently which would merit a patent and I think that is why you added your Claim 7 in your wording, is that right?
>
> A. That's right.
>
> Q. (By Mr. Cantor, continuing): That's what you consider to be the invention here?
>
> THE COURT: Yes, that's right.
>
> A. Yes, simply."

Defendants' only expert witness, Frank, whose deposition was read into evidence, testified only about the Noyes patent. There is no testimony in the record to refute Dr. Youngdahl's theories.

Appellees contend that the use of an integral hinge is old. The Patent Examiner recognized this, but allowed claim 7 for a different reason, stating:

> "1. Figure 3 of the drawings has been corrected.
>
> "2. Claim 7 is allowed.

"3. Claims 1-6 are rejected as not patentable over applicant's admittedly prior art bending brake which was demonstrated to the Examiner. The instant brake differs from the prior art brake in the use of an integral hinge as opposed to an attached or separate hinge. It is well recognized in the arts that it is obvious to make two or more separate parts integral. At the recent demonstration of applicants' brake it was impressed upon the Examiner that the new and unobvious results were obtained not solely by the use of an integral hinge but from the use of an integral hinge positioned such that it's component projections did not extend above the plane of the surface of their corresponding members. Upon inclusion of such a limitation in claims 1-6 they will be allowed.

"4. Claims 1-6 are rejected."

The positioning was caused by the flat surfaces of the Marsh hinge in the plane of their corresponding members, rather than the round surfaces of the Rauen hinge which were not in a plane with their corresponding members.

The Marsh brake met with immediate commercial success. With no established sales force, and using mailings of circulars, advertisements in trade journals, and displays at trade shows, plaintiff's total sales were about $127,000 in 1963, and $236,000 in 1964. The total combined sales of plaintiff and Van Mark of metal brakes of the Marsh patent were $356,000 in 1965, $427,000 in 1966, $519,000 in 1967, and $692,000 in 1968.

During the period of these sales the Marsh brake was sold in competition with the prior art Rauen brake. The

only substantial difference between the two brakes was the hinge. Furthermore, plaintiff sold its brake for a price which was around 38% more than the price charged for the Rauen brake.

As to the commercial success enjoyed by plaintiff, the District Court made the following observations:

> "As to the existence of the commercial success enjoyed by Tapco, the court makes two observations. To the extent that plaintiff improved on the existing bending brakes available in their market, they showed they had a useful improvement although it was unpatentable. And, inasmuch as plaintiff produced its sheet metal brake under color of patent they were bound to meet with success, due to the absence of competition."

It should not be overlooked that Van Mark was selling the patented brake in competition with plaintiff, the owner of the patent.

While commercial success will not validate a patent where invention is lacking, nevertheless in a close case where there is doubt about invention, it must be considered and may well be sufficient to tip the scales in favor of validity. *Goodyear Tire & Rubber Co. v. Ray-O-Vac Co.*, 321 U.S. 275 (1944); *General Elec. Co. v. Sciaky Bros. Inc.*, 304 F. 2d 724 (6th Cir. 1962); *Aluminum Co. of America v. Sperry Prods.*, 285 F. 2d 911 (6th Cir. 1960), *cert. denied*, 368 U.S. 890 (1961).

Here the invention is narrow. It is aided by the statutory presumption in favor of validity. 35 U.S.C. § 282.

Defendants could easily have avoided liability by choosing any one of the many alternatives to copying the Marsh brake. Among these alternatives, defendants could have continued to use the prior art Rauen brake; they could

have welded a Rauen-type hinge onto the members for greater hinge stability; or they could have used an extruded integral hinge of any design which did not adopt plaintiff's teaching to position the surface of the hinge projections flush with the plane of their corresponding member surfaces.

Furthermore, after litigation defendants made a settlement with plaintiff by taking a non-exclusive license involving substantial royalty payments. Surely they had ample time prior to making the settlement to investigate the Marsh patent and the prior art and to determine whether the improvement was obvious, whether it had utility, and whether it was achieving substantial commercial success.

Speaking of the presumption of validity, Circuit Judge Phillips, who is now Chief Judge, in *Monroe Auto Equip. Co. v. Heckethorn Mfg. & Supply Co.*, 332 F. 2d 406, 412-13 (6th Cir. 1964), said:

> " . . . [W]e also recognize that a presumption of validity attaches to a patent once it has been issued by the patent office. 35 U.S.C. § 282; Aluminum Co. of America v. Sperry Products, Inc., 285 F. 2d 911, 916 C.A. 6), cert. denied, 368 U.S. 890. This is only proper because of the complexities of patent law and the expertise of the patent office. See Williams Mfg. Co. v. United Shoe Mach. Corp., 121 F. 2d 273, 277 (C.A. 6), cert. denied, 316 U.S. 364, 62 S. Ct. 1179, 86 L.Ed. 1537. However, the large number of patents declared invalid by the courts bear telling witness to the fact that this presumption is in no way conclusive. The presumption of course is weakened if applicable prior art has not been considered by the patent office. Harvey v. Levine, 332 F.2d 481, 484 (C.A. 6); Aluminum Co. of America v. Sperry Products, Inc., supra."

On the other hand, where the most pertinent prior art has been considered by the patent office, the presumption is greatly strengthened. *Great Lakes Equip. Co. v. Fluid Sys., Inc.*, 217 F.2d 613, 617 (6th Cir. 1954), citing *Williams Mfg. Co. v. United Shoe Mach. Corp.*, 121 F. 2d 273, 277 (6th Cir. 1941), aff'd, 316 U.S. 364 (1942).

In the present case the defendants contend that the most pertinent prior art was not submitted to nor considered by the Patent Examiner. Certainly the Rauen letters patent were not submitted. On the other hand plaintiff did submit to the patent office and demonstrated a brake of its own manufacture, which brake in all respects important to this case embodied the disclosures of the Rauen patent.

Furthermore, so far as the prior art was cited by defendant to establish the obviousness of an integral hinge, the question of whether the Noyes (992,038 [1911]), Moynahan (2,288,013 [1942] airplane wing), or Rauen patents were considered seems irrelevant since the Patent Examiner considered an integral hinge obvious to those skilled in the prior art, and disallowed claims 1-6 as originally written. In fact, the Examiner allowed claim 7 only because it described the top surface of the hinge as being flat and lying within the plane of the corresponding members' surfaces. In our opinion, the normal presumption of validity attaches, and may be "greatly strengthened" by consideration of the state of the prior art, even though the particular letters patents upon which defendants rely to establish that art, were not considered.

It should also be noted that Judge Phillips, in *Monroe*, cautioned against the use of prior patents from a "non-analogous" art. It is submitted from the above conclusion that even the Patent Examiner considered integral piano hinges obvious, and that the question of invention (which

is synonymous with unobviousness) centers around whether the flat hinge top, lying in the plane of the surfaces of the corresponding members, is obvious.

On this particular question, the only pertinent prior art cited by defendant which the Patent Examiner could have considered, is the old Noyes patent which was on a blacksmith's jig for making beam-clamps. However, a substantial problem arises as to whether this is non-analogous prior art. While the Noyes patent is used for some metal bending, the metal bent is relatively narrow, thick metal bars or beams, which are heated. In fact, it appears that most of the bending is done by a hammer. While the bending lever of the jig has flat fingers which could be called projections, the clamping members, unlike Marsh, have no projections, and the clamping surfaces do not lie on the same plane as the flat surfaces of the spaced fingers to which the bending handle is pivoted. The bar or anvil does not clamp the heated metal against any clamping surface. On p. 2, col. 1 of the Noyes patent, it is stated that bending lever 24 apparently does do some bending in the final step of the formation of the clamp; however, a squared corner is not desired and it does not appear that the hinge has any supporting function during the bend.

THE TEST OF OBVIOUSNESS AND "ANALOGOUS PRIOR ART"

Obviousness is said to mean that the particular, claimed improvement would be obvious to one skilled in and knowledgeable of the "prior art." In determining obviousness or non-obviousness, the courts must make factual inquiry into the scope and content of prior art, the differences between prior art and the claims at issue, and the level of or-

dinary skill in the pertinent art. See generally, *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

Putting aside the question of whether utility could be challenged, it seems fairly clear that if there is no functional improvement made by the flat-topped hinge, then the mere use of an integral piano-type hinge would be obvious and it was so considered by the Patent Examiner. If, however, the flat-topped hinge is a functioning improvement to the prior art, then it would be patentable (so far as obviousness is concerned) unless it could be proved by defendants, with clear proof, that the prior art would suggest to a person skilled in the art the particular combination and configuration of ideas adopted by plaintiff.

The Supreme Court's treatment of the various patents-in-suit in *Graham v. John Deere Co., supra,* discloses that in discussing "obviousness" and finding the patents invalid, the Court assumed the usefulness of the claims, but found that the particular configuration chosen, even if not disclosed in any single prior patent, merely achieved a result in adoption of a principle known to the art, but achieved by a slightly different arrangement which would be obvious to anyone skilled in the art.

On the question of what constitutes "analogous" prior art, it is evident that the Supreme Court in *Graham* felt a broad reading of the term was required. *See, e.g.*, 383 U.S. at 19, 35. Thus, in the present case, the choice of "machine designing" generally (although a broad category) as the pertinent prior art, seems appropriate.

Accepting the Noyes and Moynahan patents as applicable prior art, we cannot see where the particular combination of parts to achieve a better result on a sheet metal bending brake is pointed out by the prior art. Granted,

an integral hinge is not new; but under the assumption that the flat-topped "gapless" hinge contributes to achieve the result, there is only the 1911-Noyes patent cited by defendants to show "obviousness." Yet as we have previously pointed out, Noyes does not disclose the "obviousness" of the use of a flat-topped hinge to give support to the metal as it is being bent, or to make a better bend.

Plaintiff has combined the old art piano-type integral hinge with a new type "flat, gapless" hinge not known to the prior relevant art, in such a way as to create a new, better and unsuspected result. The Marsh hinge provides greater support and prevents the sheet metal from slipping into a "gap," and thus prevents non-uniformity and marring.

The invention certainly is not dramatic, but it does not have to be so. As well stated by District Judge Jones in *Squeez-a-Purse Corp. v. Stiller,* 175 F. Supp 667, 669, (N.D. Ohio 1959), *aff'd* 280 F. 2d 424 (6th Cir.), *cert. denied,* 364 U.S. 828 (1960):

> "It is realized and must be conceded that the defendants' article is not of striking inventive quality; it is in fact one of modest proportions, but ' 'tis enough, 'twill serve' as an article made up of a unique and unitary combination of old elements with new and useful elements (F and G) which constitutes a definite advance which has received universally wide acceptance and instant commercial success in its field and has contributed more than a little to its art. To this, plaintiff has added its tribute by producing and marketing an indistinguishable copy."

In *Goodyear Tire & Rubber Co. v. Ray-O-Vac Co.,* 321 U.S. 275, 279 (1944), the Court stated:

> "Viewed after the event, the means Anthony adopted seem simple and such as should have been obvious to those who worked in the field, but this is not enough to negative invention . . . [footnote omitted]."

UTILITY

Of course, if as the defendants contend, the flat, gapless features have no utility, then the "invention" would only be the use of an old integral piano-type hinge which everyone agrees was obvious.

Defendants have continuously argued that the flat surface of the hinge parts, lying flush in the planes of their corresponding clamping and bending members, serves absolutely no functional purpose at any time during the bend. Further the defendants have asserted that the old, separate piano hinge (where, due to a rounded hinge, a "gap" existed between the flat surfaces of each member and the point where the top of the hinge met the plane of the member surface) did not permit a slipping of the metal into the "gap" causing an uneven bend and marking of the coated surface. To establish this, defendants particularly relied upon the demonstrations made by defense counsel to the Court on bending brakes of Rauen, and of plaintiff's patented brake.

As suggested above, this would appear to challenge the usefulness of precisely that claim upon which plaintiff's patent rests; briefly, defendants challenge the utility of the patented brake. There is a substantial doubt that the defendants may be permitted to do so.

A rule of long standing in this Circuit and still adhered to is that "one who appropriates the teachings of a patent

may not deny the utility of the invention." *U.S. Gypsum Co. v. Consolidated Expanded Metal Cos.*, 130 F. 2d 888, 889 (6th Cir. 1942), *cert. denied*, 317 U.S. 698 (1943). See also, *Miller v. Daybrook-Ottawa Corp.*, 291 F. Supp. 896 (N.D. Ohio, 1968).

There can be little question that defendants have copied, virtually exactly, plaintiff's bending brake. There is no question that defendants have used a piano-type integral hinge with the flat surfaces claimed by plaintiff. Thus, according to the established rule in this Circuit, it would seem that defendants may not challenge the utility of the flat surfaces which plaintiff claims as its invention.

It should be noted that defendants' proof as to lack of utility is questionable to say the least. They claim that the demonstrations made by defense counsel discredited the explanation of Dr. Youngdahl, plaintiff's expert. However, the thrust of Youngdahl's testimony was that great additional support was given by the hinge during the bending, particularly in its final stage, without permitting the metal to slip down in a "gap" left by the hinge. Since Dr. Youngdahl's testimony was directed to the "critical" final stage as the bend approached the vertical, the demonstration by defense counsel, which embodied only partial bends, logically cannot credit nor discredit Dr. Youngdahl's testimony. Further, it is noted that one of the problems solved by plaintiff's brake was the lack of uniformity in bend along the length of the sheet metal. This difficulty was experienced particularly with respect to sheet metal bent along lengths up to several feet, whereas the bending demonstrated in court was on sheet metal no longer than one inch along the bend. It might very well be that a bend that was only one inch in length could be achieved with uniformity and without slipping, whereas a bend of a ten-foot section of sheet metal could involve entirely different pres-

sures and forces upon it, causing lack of uniformity over its length, either through "slipping" into the "gap" or through lack of the support asserted to be afforded by the flat-topped hinge.

Although the District Court found Dr. Youngdahl's theories "plausible," he rejected them relying "most heavily" on the courtroom demonstration of a partial bend made by defendants' counsel, who was not sworn as a witness and did not qualify as an expert. As we have pointed out, the validity of this demonstration was questioned at the time. Furthermore, when plaintiff's witness, Dr. Youngdahl, who qualified as an expert, endeavored to make a demonstration in open court, the following episode took place:

> "Dr. Youngdahl:
>
> Plaintiff's Exhibit 16 is a piece of painted aluminum metal that is used on the brake, Plaintiff's Exhibit 18, to bend up the 1" flange I might demonstrate on the brake.
>
> "The Court:
>
> Don't demonstrate. I don't want to see it unless somebody wants it particularly."

No one stated that he wanted to see the test and it was not made by Dr. Youngdahl. After Dr. Youngdahl had completed his testimony and left to return to California, counsel for defendants undertook to make the questionable demonstration.

Defendants had full opportunity to offer evidence to refute the testimony of Dr. Youngdahl, but they did not do so.

It would seem to us that the demonstration by opposing counsel more properly should have been made as part of

the cross-examination of Dr. Youngdahl, or at least it could have been supported by sworn testimony of witnesses with the right of plaintiff to cross-examine. The unsworn, self-serving statements of counsel are not evidence.

In our opinion, claim 7 particularly points out and distinctly claims the subject matter of the invention.

The statute provides:

> "Patentability shall not be negatived by the manner in which the invention is made." 35 U.S.C. § 103.

Nor do the statutes require that an inventor understand and disclose the theory of his invention. He is entitled to all of the benefits of his invention, even though they were greater than he believed. Dellers Walker on Patents, 2d Ed., Vol. 4, § 238, pp. 106, 107.

Infringement was not made an issue in the District Court nor here.

In our opinion, Claim 7 of the Marsh patent is valid and was infringed by the defendants. The judgment of the District Court is reversed and the cause is remanded for further proceedings consistent with this opinion.

No. 20,835

UNITED STATES COURT OF APPEALS

for the Sixth Circuit

Tapco Products Company,
Plaintiff-Appellant,
vs.
Van Mark Products Corporation
and
Eugene Van Cleave,
Defendants-Appellees.

ORDER ON PETITION FOR CORRECTION AND REHEARING

(Filed August 30, 1971)

Before Weick, Peck and McCree, Circuit Judges.

Appellees have attached to their petition for correction and rehearing a so-called petition appendix containing thirty photographs of physical exhibits in the office of the United States Marshal in Detroit, taken on July 16, 1971, after our decision in this case had been announced on July 12, 1971. Enlargements of some of these photographs appear in the petition for correction and rehearing. The photographs purport to show an *ex parte* demonstration conducted by appellees in the absence of appellant's counsel, demonstrating the bending of sheet metal in various stages by the patented machine and the prior art sheet metal bending brake.

In addition, appellee shipped to the Court the large physical exhibits 18, 19 and 4, and asked the Court "to try out

these exhibits and observe their bending operations", and furnished operating instructions. In the letter of transmittal to the Court appellees admitted that this approach was "unorthodox." It certainly is. Counsel states:

> "We believe there is precedent for this. We understand that in the oral argument in U.S. v. Adams, 1966, 383 U.S. 39, the Supreme Court permitted counsel to demonstrate the patented device."

There is nothing in the opinion of the Supreme Court to substantiate this assertion, but even if true, the Court certainly did not permit an *ex parte* experiment or demonstration after the case had been argued and decided.

Appellees made no request to us for permission to conduct a demonstration of the physical exhibits 18, 19 and 4 prior to our decision of the case. The approach here is unprecedented. The photographs in the petition appendix and the enlargements in the petition which depict the demonstration are not in evidence in the case and cannot be considered by us.

In our Opinion we discussed the demonstration conducted by appellees' counsel in the District Court after plaintiff's expert, Dr. Youngdahl, had finished his testimony and left for California. We stated:

> "Defendants had full opporutnity to offer evidence to refute the testimony of Dr. Youngdahl, but they did not do so.
>
> "It would seem to us that the demonstration by opposing counsel more properly should have been made as part of the cross-examination of Dr. Youngdahl, or at least it could have been supported by sworn testimony of witnesses with the right of plain-

> tiff to cross-examine. The unsworn, self-serving statements of counsel are not evidence."

We would also point out the fact that, as appellees apparently recognize, the burden of proving invalidity rested upon them. Their argument has always been that the courtroom demonstration by appellees' counsel discredited Dr. Youngdahl's testimony and sustained their burden. We fully answered that contention in our Opinion, which stated:

> "Since Dr. Youngdahl's testimony was directed to the 'critical' final stage as the bend approached the vertical, the demonstration by defense counsel which embodied only partial bends, logically cannot credit nor discredit Dr. Youngdahl's testimony."

This same passage also points out that the enlargements in the petition for rehearing do not conform to the demonstrative evidence of defense counsels' demonstration at trial, since the enlargements depict the "critical" final stage as the bend approaches the vertical. In short, it is too late for appellees to supply deficiencies in their proof.

Appellees also argue in their petition for rehearing that they do not challenge the utility of the claimed invention. In our Opinion we noted that the appellees argued that the claim of invention, which relates only to the "flat, gapless" feature of the hinge, served no functional purpose, and we held that to challenge the validity of the patent on this ground was to challenge utility, which appellees are barred from doing. Appellees merely reaffirm their challenge of function in their petition for rehearing.

> "What is challenged is the false, non-existent *function,* namely, that the hinge also *functions* to support

> the sheet metal during bending." (Appellees' Petition for Rehearing at 6-7 [emphasis added]).

The appellees' remaining contentions are so frivolous and insubstantial as to require no further discussion.

The petition to correct and rehear is denied.

Entered by order of the Court.

/s/ James A. Higgins
Clerk.

District Court, E. D. Michigan, S. Division

Tapco Products Company, Inc.
v.
Van Mark Products Corporation, et al.

No. 31627 Decided July 28, 1970

OPINION

PATENTS

1. Patentability — Evidence of — Commercial success — Causes (§51.4555)

In considering commercial success, court notes that, inasmuch as patent owner produced device under color of patent, it was bound to meet with success, due to absence of competition.

Particular patents—Sheet Metal Brake

3,161,223, Marsh, Sheet Metal Brake, invalid.

Action by Tapco Products Company, Inc., against Van Mark Products Corporation and Eugene Van Cleave for patent infringement, unfair competition, and breach of patent license. Patent held to be invalid.

Basil C. Foussianes, Barnes, Kisselle, Raisch & Choate, Walter O. Koch, and Bodman, Longley, Bogle, Armstrong & Dahling, all of Detroit, Michigan, for plaintiff.

Bernard J. Cantor, Hiram P. Settle, Jr., Daniel G .Cullen, and Cullen, Settle, Sloman & Cantor, all of Detroit, Michigan, for defendants.

Kaess, District Judge.

This is a case involving validity and infringement of the Marsh Patent No. 3,161,223 relating to a sheet metal bending brake.

The plaintiff, Tapco Products Company, Inc., is a manufacturer of sheet metal bending brakes and is the owner of the Marsh Patent No. 3,161,223. The defendant Eugene Van Cleave was a former employee of the plaintiff; and after leaving the plaintiff's employ, Van Cleave formed Van Mark Products Corporation, which entered into the production of sheet metal bending brakes, in competition with the plaintiff.

Plaintiff sued the defendants for unfair competition and the appropriation of trade secrets in the Michigan Circuit Court in Wayne County. That suit was settled, and as a part of the settlement, license royalties were to be paid by the defendant Van Mark Products Corporation to the plaintiff Tapco. Defendants failed to comply with their royalty obligations and after some renegotiations all cooperation between the parties broke down.

Plaintiff thereupon filed the present suit, alleging patent infringement, unfair competition, and causes of action arising out of the license agreement.

The parties and the court have agreed to a postponement of trial on the remaining issues until the issue of patent infringement and validity has been determined. Therefore this opinion is restricted in scope to the issue of the patent itself.

The inventiveness relied upon by the plaintiff in support of the Marsh Patent No. 3,161,223, in claims 1-6, is as follows:

> "each of said first and second members having substantially the entire length of the longitudinal edges

thereof formed with longitudinally spaced intermeshing integral projections,

each said projection of each said member being positioned such that all portions thereof do not extend above the plane of the surface of its corresponding member when the surfaces are substantially aligned,

said projections having aligned openings therein,

a hinge pin extending through said integral projections and thereby defining a hinge so that said second member may be swung relative to the first member for bending sheet metal about said anvil member."

And the inventiveness relied upon in claim 7 is as follows:

"each of said first and second members having substantially the entire length of the longitudinal edges thereof formed with longitudinally spaced intermeshing integral projections,

each said projection of each said member having a surface thereof lying in the plane of the flat surface of its corresponding member,

said projections having aligned openings therein,

and a hinge pin extending through said integral projections and thereby defining a hinge so that said second member may be swung relative to said first member to bend said metal about said anvil member."

The record discloses that plaintiff's claim of invention is based upon two improvements—(1) the use of an "integral" hinge to strengthen the bending mechanism, (2) the use of flat hinge projections not to extend above the

bending surfaces in order to give additional support for a more uniform bend.

The defenses raised in opposition to the plaintiff's allegation of patent validity are (1) obviousness under 35 U. S.C. § 102, and (2) failure to claim the alleged invention in accordance with 35 U. S. C. § 112.

On the question of obviousness, the Supreme Court laid down requirements for such a determination in the case of Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459, 466-467 (1966), wherein Justice Clark delivering the opinion of the court states:

> "Approached in this light, the § 103 additional condition, when followed realistically, will permit a more practical test of patentability. The emphasis on nonobviousness is one of inquiry, not quality, and, as such, comports with the constitutional strictures.
>
> While the ultimate question of patent validity is one of law, A. & P. Tea Co. v. Supermarket Corp. (340 U.S. 147 [1950]) at 155, 87 USPQ 303, 307, the § 103 condition, which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have rele-

vancy. See Note, Subtests of 'Non-obviousness'; A Nontechnical Approach to Patent Validity, 112 U. Pa. L. Rev. 1169 (1964).

This is not to say, however, that there will not be difficulties in applying the nonobviousness test. What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development. We believe that strict observance of the requirements laid down here will result in that uniformity and definiteness which Congress called for in the 1952 Act.

While we have focused attention on the appropriate standard to be applied by the courts, it must be remembered that the primary responsibility for sifting out unpatentable material lies in the Patent Office. To await litigation is—for all practical purposes—to debilitate the patent system. We have observed a notorious difference between the standard applied by the Patent Office and by the courts. While many reasons can be adduced to explain the discrepancy, one may well be the free rein often exercised by examiners in their use of the concept of 'invention'."

In the light of the Supreme Court's ruling in Graham, this court finds the record in the case at bar to be adequate for determining the question of obviousness.

The prior art as manifested by the Moynihan Patent No. 2,288,013 and the Noyes Patent No. 992,038 indicates that integral hinges were known prior to the patent-in-suit and had previously been used in bending devices. The testi-

mony of both experts, Mr. Youngdahl and Mr. Frank, unquestionably indicates to the court that integral hinges were recognized by those skilled in the art as being a stronger hinge and had been put to use previously in bending brakes. Further, the Patent Office Examiner's opinion, contained in the Marsh Patent file wrapper, indicates that the use of the integral hinge is obvious, for as he stated with reference to the integral hinge:

> "• • • It is well recognized in the arts that it is obvious to make two or more separate parts integral • • •" (Tr. 137)

Thus, this court finds the plaintiff's first alleged improvement, the employment of an integral hinge in the Marsh Patent No. 3,161,223, to be obvious to one skilled in the art at the time of the invention.

The Patent Office Examiner's opinion, however, turned on a different point as indicated by the following statement:

> "• • • At the recent demonstration of the applicant's brake it was impressed upon the examiner that the new an[d] unobvious results were obtained not solely by the use of an integral hinge but from the use of an integral hinge positioned such that its component projections did not extend above the plane of the surface of their corresponding members."

This brings us to plaintiff's second alleged inventiveness—the use of flat hinge projections not to extend above the bending surfaces in order to give additional support for a more uniform bend.

The defendants reject this alleged inventiveness on two bases: (1) it was not properly claimed in accordance with

35 U.S.C. § 112, which requires the patentee to specify his invention in the claims, Kaiser v. McLouth, 400 F.2d 36, 158 USPQ 565 (6th Cir. 1968); and (2) it is not the proper subject for patent because it is not true.

As to the claims made in the Marsh Patent, there are two descriptions of the configuration or location of the hinge projections.

In Claims Nos. 1, 4, 5 and 6 it is stated that:

> "* * * each said projection of each said member being positioned such that all portions do not extend above the plane of the surface of its corresponding member when the surfaces are substantially aligned,"

And in Claim No. 7 it is stated that:

> "* * * each said projection of each said member having a surface face thereof lying in the plane of the flat surface of its corrsponding member."

The defendants maintain that in Claims Nos. 1, 4, 5, and 6 the words "do not extend above the plane of the surface of its corresponding member" admit to the possibility of extending below such a plane which has been shown to be the case in prior art. Defendants further maintain that in Claim No. 7 the words "having *a* surface face" admit to the possibility that not *all* of the surface of the projections need lie in that same plane. This also has been shown to be the case in prior art.

Therefore, the defendant concludes that the "gapless" hinge projections theory espoused by Mr. Youngdahl's testimony is not included in the patent claims. For had they been so included, the claims would have required *all* of the surface face of the hinge projections to lie in the plane of the corresponding members.

The court sees merit in the defense proposed interpretation of the patent claims. Thus, the court questions whether the gapless hinge projection theory is covered by the claims as written. But the plaintiff's interpretation is also deserving of merit.

However the court, not wishing to become engulfed in a battle of semantics, relies most heavily upon the court room demonstration, which negates plaintiff's position. The court personally observed actual physical samples of both a prior art brake and a Marsh patent brake. In both instances, the sheet metal was lifted away from the hinge as the metal was bent, due to the geometric characteristics of the spacing of the brake parts in relation to the metal to be bent.

Thus, the court finds plaintiff's interpretation of flat, gapless hinge projections providing additional support and producing a more uniform bend to be unsupported in fact and therefore the court finds defendants' interpretation of the claims to be the proper one.

As a result plaintiff's second allegation of inventiveness must also fall.

[1] As to the existence of the commercial success enjoyed by Tapco, the court makes two observations. To the extent that plaintiff improved on the existing bending brakes available in their market, they showed they had a useful improvement although it was unpatentable. And, inasmuch as plaintiff produced its sheet metal brake under color of patent they were bound to meet with success, due to the absence of competition.

Therefore, the court finds the plaintiff's patent to be invalid and orders the entry upon the record in this matter No Cause of Action for Patent Infringement.